

SEQUENCE LISTING

<110> MIYAGAWA , Shuji
MATSUNAMI , Katsuyoshi

<120> HLA-E CHIMERIC MOLECULE

<130> 2520-0132PUS1

<140> US 10/578,139
<141> 2006-05-03

<160> 92

<170> PatentIn version 3.4

<210> 1
<211> 21
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic chimeric sequence
SP of HLA-E

<400> 1

Met Val Asp Gly Thr Leu Leu Leu Leu Leu Ser Glu Ala Leu Ala Leu
1 5 10 15

Thr Gln Thr Trp Ala
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<210> 2
<211> 90
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic chimeric sequence
al domain of HLA-E

<400> 2

Gly Ser His Ser Leu Lys Tyr Phe His Thr Ser Val Ser Arg Pro Gly
1 5 10 15

Arg Gly Glu Pro Arg Phe Ile Ser Val Gly Tyr Val Asp Asp Thr Gln
20 25 30

Phe Val Arg Phe Asp Asn Asp Ala Ala Ser Pro Arg Met Val Pro Arg

35

40

45

Ala Pro Trp Met Glu Gln Glu Gly Ser Glu Tyr Trp Asp Arg Glu Thr
 50 55 60

Arg Ser Ala Arg Asp Thr Ala Gln Ile Phe Arg Val Asn Leu Arg Thr
 65 70 75 80

Leu Arg Gly Tyr Tyr Asn Gln Ser Glu Ala
 85 90

<210> 3

<211> 92

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic chimeric sequence
a2 domain of HLA-E

<400> 3

Gly Ser His Thr Leu Gln Trp Met His Gly Cys Glu Leu Gly Pro Asp
 1 5 10 15

Arg Arg Phe Leu Arg Gly Tyr Glu Gln Phe Ala Tyr Asp Gly Lys Asp
 20 25 30

Tyr Leu Thr Leu Asn Glu Asp Leu Arg Ser Trp Thr Ala Val Asp Thr
 35 40 45

Ala Ala Gln Ile Ser Glu Gln Lys Ser Asn Asp Ala Ser Glu Ala Glu
 50 55 60

His Gln Arg Ala Tyr Leu Glu Asp Thr Cys Val Glu Trp Leu His Lys
 65 70 75 80

Tyr Leu Glu Lys Gly Lys Glu Thr Leu Leu His Leu
 85 90

<210> 4

<211> 92

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic chimeric sequence
a3 domain of HLA-E

<400> 4

Glu Pro Pro Lys Thr His Val Thr His His Pro Ile Ser Asp His Glu
1 5 10 15

Ala Thr Leu Arg Cys Trp Ala Leu Gly Phe Tyr Pro Ala Glu Ile Thr
20 25 30

Leu Thr Trp Gln Gln Asp Gly Glu Gly His Thr Gln Asp Thr Glu Leu
35 40 45

Val Glu Thr Arg Pro Ala Gly Asp Gly Thr Phe Gln Lys Trp Ala Ala
50 55 60

Val Val Val Pro Ser Gly Glu Glu Gln Arg Tyr Thr Cys His Val Gln
65 70 75 80

His Glu Gly Leu Pro Glu Pro Val Thr Leu Arg Trp
85 90

<210> 5

<211> 63

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic chimeric sequence
Transmembrane domain of HLA-E

<400> 5

Lys Pro Ala Ser Gln Pro Thr Ile Pro Ile Val Gly Ile Ile Ala Gly
1 5 10 15

Leu Val Leu Leu Gly Ser Val Val Ser Gly Ala Val Val Ala Val
20 25 30

Ile Trp Arg Lys Lys Ser Ser Gly Gly Lys Gly Gly Ser Tyr Ser Lys
35 40 45

Ala Glu Trp Ser Asp Ser Ala Gln Gly Ser Glu Ser His Ser Leu
50 55 60

<210> 6
 <211> 63
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic chimeric sequence
 SP of HLA-E

<400> 6
 atggtagatg gaacctctct ttactctctc tcggaggccc tggcccttac ccagacctgg 60
 gcg 63

<210> 7
 <211> 270
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic chimeric sequence
 a1 domain of HLA-E

<400> 7
 ggctccact ccttgaagta ttccacact tccgtgtccc ggcccgccg cgaggagccc 60
 cgttcctct ctgtgggcta cgtggacgac acccagttcg tgcgcttcga caacgacgcc 120
 gcgagtcgga ggatggtgca gcgggcgccg tggatggagc aggaggggtc agagtattgg 180
 gaccgggaga cacggagcgc cagggaacc gcacagattt tccgagtga tctgcggacg 240
 ctgcgaggct actacaatca gagcgaggcc 270

<210> 8
 <211> 276
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic chimeric sequence
 a2 domain of HLA-E

<400> 8
 gggctcaca ccctgcagtg gatgcatggc tgcgagctgg ggcccacag gcgcttcctc 60
 cgcggtatg aacagttcgc ctacgacggc aaggattatc tcaccctgaa tgaggacctg 120
 cgctcctgga ccgcggtgga cagcgaggct cagatctccg agcaaaagtc aaatgatgcc 180
 tctgaggcgg agcaccagag agcctacctg gaagacacat gcgtggagtg gctccacaaa 240

tacctggaga aggggaagga gacgtgctt cacctg

276

<210> 9
<211> 276
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic chimeric sequence
a3 domain of HLA-E

<400> 9
gagccccc aa agacacacgt gactcaccac cccatctctg accatgaggc caccctgagg 60
tgctggggcc tgggcttcta cctgcggag atcacactga cctggcgaca ggatggggag 120
ggccataccc aggacacgga gctcgtggag accaggcctg caggggatgg aaccttccag 180
aagtgggcag ctgtggtggt gccttctgga gaggagcaga gatacacgtg ccatgtgcag 240
catgaggggc tacccgagcc cgtcaccctg agatgg 276

<210> 10
<211> 192
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic chimeric sequence
Transmembrane domain of HLA-E

<400> 10
aagccggcct cccagcccac catcccacatc gtgggcatca ttgctggcct ggttctcctt 60
ggatctgtgg tctctggagc tgtggttgct gctgtgatat ggaggaagaa gagctcaggt 120
ggaaaaggag ggagctactc taaggctgag tggagcgaca gtgccagggt gtctgagtct 180
cacagcttgt aa 192

<210> 11
<211> 24
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic chimeric sequence
SP of HLA-G1

<400> 11

Met Val Val Met Ala Pro Arg Thr Leu Phe Leu Leu Leu Ser Gly Ala
 1 5 10 15

Leu Thr Leu Thr Glu Thr Trp Ala
 20

<210> 12
 <211> 90
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic chimeric sequence
 a1 domain of HLA-G1

<400> 12

Gly Ser His Ser Met Arg Tyr Phe Ser Ala Ala Val Ser Arg Pro Gly
 1 5 10 15

Arg Gly Glu Pro Arg Phe Ile Ala Met Gly Tyr Val Asp Asp Thr Gln
 20 25 30

Phe Val Arg Phe Asp Ser Asp Ser Ala Cys Pro Arg Met Glu Pro Arg
 35 40 45

Ala Pro Trp Val Glu Gln Glu Gly Pro Glu Tyr Trp Glu Glu Glu Thr
 50 55 60

Arg Asn Thr Lys Ala His Ala Gln Thr Asp Arg Met Asn Leu Gln Thr
 65 70 75 80

Leu Arg Gly Tyr Tyr Asn Gln Ser Glu Ala
 85 90

<210> 13
 <211> 92
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic chimeric sequence
 a2 domain of HLA-G1

<400> 13

Ser Ser His Thr Leu Gln Trp Met Ile Gly Cys Asp Leu Gly Ser Asp
 1 5 10 15

Gly Arg Leu Leu Arg Gly Tyr Glu Gln Tyr Ala Tyr Asp Gly Lys Asp
 20 25 30

Tyr Leu Ala Leu Asn Glu Asp Leu Arg Ser Trp Thr Ala Ala Asp Thr
 35 40 45

Ala Ala Gln Ile Ser Lys Arg Lys Cys Glu Ala Ala Asn Val Ala Glu
 50 55 60

Gln Arg Arg Ala Tyr Leu Glu Gly Thr Cys Val Glu Trp Leu His Arg
 65 70 75 80

Tyr Leu Glu Asn Gly Lys Glu Met Leu Gln Arg Ala
 85 90

<210> 14
 <211> 92
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic chimeric sequence
 a3 domain of HLA-G1

<400> 14

Asp Pro Pro Lys Thr His Val Thr His His Pro Val Phe Asp Tyr Glu
 1 5 10 15

Ala Thr Leu Arg Cys Trp Ala Leu Gly Phe Tyr Pro Ala Glu Ile Ile
 20 25 30

Leu Thr Trp Gln Arg Asp Gly Glu Asp Gln Thr Gln Asp Val Glu Leu
 35 40 45

Val Glu Thr Arg Pro Ala Gly Asp Gly Thr Phe Gln Lys Trp Ala Ala
 50 55 60

Val Val Val Pro Ser Gly Glu Glu Gln Arg Tyr Thr Cys His Val Gln
 65 70 75 80

His Glu Gly Leu Pro Glu Pro Leu Met Leu Arg Trp

<210> 15
 <211> 40
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic chimeric sequence
 Transmembrane domain of HLA-G1

<400> 15

Lys Gln Ser Ser Leu Pro Thr Ile Pro Ile Met Gly Ile Val Ala Gly
 1 5 10 15

Leu Val Val Leu Ala Ala Val Val Thr Gly Ala Ala Val Ala Ala Val
 20 25 30

Leu Trp Arg Lys Lys Ser Ser Asp
 35 40

<210> 16
 <211> 72
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic chimeric sequence
 SP of HLA-G1

<400> 16
 atgggtgtgca tggcgccccc aaccctcttc ctgctgctct cgggggccct gacctgacc 60
 gagacctggg cg 72

<210> 17
 <211> 270
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic chimeric sequence
 al domain of HLA-G1

<400> 17
 ggctccact ccatgaggta ttccagcgcc gccgtgtccc ggcccggccg cggggagccc 60
 cgtctcatcg ccatgggcta cgtggacgac acgcagttcg tgcggttcga cagcgactcg 120

gcgtgtccga ggatggagcc gcgggcgcgcg tgggtggagc aggaggggcc agagtattgg 180
 gaagaggaga cacggaacac caaggccac gcacagactg acagaatgaa cctgcagacc 240
 ctgcgcggct actacaacca gagcgaggcc 270

<210> 18
 <211> 276
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic chimeric sequence
 a2 domain of HLA-G1

<400> 18
 agttctcaca ccctccagtg gatgattggc tgcgacctgg ggtccgacgg tcgcctcctc 60
 cgcggggatg aacagtatgc ctacgatggc aaggattacc tcgccctgaa cgaggacctg 120
 cgctcctgga ccgcagcgga cactgcggct cagatctcca agcgcaagtg tgaggcggcc 180
 aatgtggctg aacaaaggag agcctacctg gagggcacgt gcgtggagtg gctccacaga 240
 tacctggaga acggaagga gatgctgcag cgcgcg 276

<210> 19
 <211> 276
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic chimeric sequence
 a3 domain of HLA-G1

<400> 19
 gacccccca agacacacgt gaccacccac cctgtctttg actatgaggc cacctgagg 60
 tgctggggccc tgggcttcta ccctgcggag atcatactga cctggcagcg ggatggggag 120
 gaccagacc aggactgga gctcgtggag accaggcctg caggggatgg aaccttccag 180
 aagtgggcag ctgtggtggt gccttctgga gaggagcaga gatacacgtg ccatgtgcag 240
 catgaggggc tgccggagcc cctcatgctg agatgg 276

<210> 20
 <211> 123
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic chimeric sequence
 Transmembrane domain of HLA-G1

<400> 20
 aagcagtcctt ccctgcccac catccccatc atgggtatcg ttgctggcct ggttgctcctt 60
 gcagctgtag tcaactggagc tgcggtcgct gctgtgctgt ggagaaagaa gagctcagat 120
 tga 123

<210> 21
 <211> 24
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic chimeric sequence
 Reformed SP

<400> 21
 Met Ala Val Met Ala Pro Arg Thr Leu Val Leu Leu Leu Ser Gly Ala
 1 5 10 15

Leu Thr Leu Thr Glu Thr Trp Ala
 20

<210> 22
 <211> 90
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic chimeric sequence
 al domain

<400> 22
 Gly Ser His Ser Leu Lys Tyr Phe His Thr Ser Val Ser Arg Pro Gly
 1 5 10 15

Arg Gly Glu Pro Arg Phe Ile Ser Val Gly Tyr Val Asp Asp Thr Gln
 20 25 30

Phe Val Arg Phe Asp Asn Asp Ala Ala Ser Pro Arg Met Val Pro Arg
 35 40 45

Ala Pro Trp Met Glu Gln Glu Gly Ser Glu Tyr Trp Asp Arg Glu Thr
 50 55 60

Arg Ser Ala Arg Asp Thr Ala Gln Ile Phe Arg Val Asn Leu Arg Thr
 65 70 75 80

Leu Arg Gly Tyr Tyr Asn Gln Ser Glu Ala
 85 90

<210> 23
 <211> 92
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic chimeric sequence
 a2 domain

<400> 23

Ser Ser His Thr Leu Gln Trp Met Ile Gly Cys Asp Leu Gly Ser Asp
 1 5 10 15

Gly Arg Leu Leu Arg Gly Tyr Glu Gln Tyr Ala Tyr Asp Gly Lys Asp
 20 25 30

Tyr Leu Ala Leu Asn Glu Asp Leu Arg Ser Trp Thr Ala Ala Asp Thr
 35 40 45

Ala Ala Gln Ile Ser Lys Arg Lys Cys Glu Ala Ala Asn Val Ala Glu
 50 55 60

Gln Arg Arg Ala Tyr Leu Glu Gly Thr Cys Val Glu Trp Leu His Arg
 65 70 75 80

Tyr Leu Glu Asn Gly Lys Glu Met Leu Gln Arg Ala
 85 90

<210> 24
 <211> 92
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic chimeric sequence
 a3 domain

<400> 24

Glu Pro Pro Lys Thr His Val Thr His His Pro Ile Ser Asp His Glu
1 5 10 15

Ala Thr Leu Arg Cys Trp Ala Leu Gly Phe Tyr Pro Ala Glu Ile Thr
20 25 30

Leu Thr Trp Gln Gln Asp Gly Glu Gly His Thr Gln Asp Thr Glu Leu
35 40 45

Val Glu Thr Arg Pro Ala Gly Asp Gly Thr Phe Gln Lys Trp Ala Ala
50 55 60

Val Val Val Pro Ser Gly Glu Glu Gln Arg Tyr Thr Cys His Val Gln
65 70 75 80

His Glu Gly Leu Pro Glu Pro Val Thr Leu Arg Trp
85 90

<210> 25

<211> 63

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic chimeric sequence
Transmembrane domain

<400> 25

Lys Pro Ala Ser Gln Pro Thr Ile Pro Ile Val Gly Ile Ile Ala Gly
1 5 10 15

Leu Val Leu Leu Gly Ser Val Val Ser Gly Ala Val Val Ala Ala Val
20 25 30

Ile Trp Arg Lys Lys Ser Ser Gly Gly Lys Gly Gly Ser Tyr Ser Lys
35 40 45

Ala Glu Trp Ser Asp Ser Ala Gln Gly Ser Glu Ser His Ser Leu
50 55 60

<210> 26

<211> 72

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<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic chimeric sequence
Reformed SP

<400> 26
atggcggtca tggcgcccg aaccctcgtc ctgctactct cgggggccct gaccctgacc 60
gagacctggg cg 72

<210> 27
<211> 270
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic chimeric sequence
al domain

<400> 27
ggctcccact ccttgaagta ttccacact tccgtgtccc ggcccggccg cggggagccc 60
cgcttcatct ctgtgggcta cgtggacgac acccagttcg tgcgcttcga caacgacgcc 120
gcgagtgcca gcatggtgcc gcgggcccgc tggatggagc aggaggggtc agagtattgg 180
gaccgggaga cacggagcgc cagggacacc gcacagattt tccgagtga tctgcggacg 240
ctgcgcggct actacaatca gagcgaggcc 270

<210> 28
<211> 276
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic chimeric sequence
a2 domain

<400> 28
agttctcaca cctccagtg gatgattggc tgcgacctgg ggtccgacgg tcgcctcttc 60
cgcggtatg aacagtatgc ctacgatggc aaggattacc tcgcctgaa cgaggacctg 120
cgctcctgga ccgcagcgga cactgcggct cagatctcca agcgcaagtg tgaggcggcc 180
aatgtggctg aacaaaggag agcctacctg gagggcacgt gcgtggagtg gtcaccaga 240
tacctggaga acgggaagga gatgctgcag cgcgcg 276

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<210> 29
 <211> 276
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic chimeric sequence
 a3 domain

<400> 29
 gagccccaa agacacacgt gactcaccac cccatctctg accatgaggg caccctgagg 60
 tgctggggccc tgggcttcta ccctgcggag atcacactga cctggcagca ggatggggag 120
 ggccataccc aggacacgga gctcgtggag accaggcctg caggggatgg aaccttccag 180
 aagtgggcag ctgtggtggt gccttctgga gaggagcaga gatacacgtg ccatgtgcag 240
 catgaggggc tacccgagcc cgtcacccctg agatgg 276

<210> 30
 <211> 192
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic chimeric sequence
 Transmembrane domain

<400> 30
 aagccggctt cccagcccac catccccatc gtgggcatca ttgctggcct ggttctcctt 60
 ggatctgtgg tctctggagc tgtggttgct gctgtgatat ggaggaagaa gagctcaggt 120
 ggaaaaggag ggagctactc taaggctgag tggagcgaca gtgccagggt gtctgagtct 180
 cacagcttgt aa 192

<210> 31
 <211> 24
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic chimeric sequence
 Reformed SP

<400> 31

Met Ala Val Met Ala Pro Arg Thr Leu Val Leu Leu Leu Ser Gly Ala
 1 5 10 15

Leu Thr Leu Thr Glu Thr Trp Ala
20

<210> 32
<211> 90
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic chimeric sequence
al domain

<400> 32

Gly Ser His Ser Leu Lys Tyr Phe His Thr Ser Val Ser Arg Pro Gly
1 5 10 15

Arg Gly Glu Pro Arg Phe Ile Ser Val Gly Tyr Val Asp Asp Thr Gln
20 25 30

Phe Val Arg Phe Asp Asn Asp Ala Ala Ser Pro Arg Met Val Pro Arg
35 40 45

Ala Pro Trp Met Glu Gln Glu Gly Ser Glu Tyr Trp Asp Arg Glu Thr
50 55 60

Arg Ser Ala Arg Asp Thr Ala Gln Ile Phe Arg Val Asn Leu Arg Thr
65 70 75 80

Leu Arg Gly Tyr Tyr Asn Gln Ser Glu Ala
85 90

<210> 33
<211> 92
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic chimeric sequence
a2 domain

<400> 33

Gly Ser His Thr Leu Gln Trp Met His Gly Cys Glu Leu Gly Pro Asp
1 5 10 15

Arg Arg Phe Leu Arg Gly Tyr Glu Gln Phe Ala Tyr Asp Gly Lys Asp
 20 25 30

Tyr Leu Thr Leu Asn Glu Asp Leu Arg Ser Trp Thr Ala Val Asp Thr
 35 40 45

Ala Ala Gln Ile Ser Lys Arg Lys Cys Glu Ala Ala Asn Val Ala Glu
 50 55 60

Gln Arg Arg Ala Tyr Leu Glu Gly Thr Cys Val Glu Trp Leu His Arg
 65 70 75 80

Tyr Leu Glu Asn Gly Lys Glu Met Leu Gln Arg Ala
 85 90

<210> 34

<211> 92

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic chimeric sequence
 a3 domain

<400> 34

Glu Pro Pro Lys Thr His Val Thr His His Pro Ile Ser Asp His Glu
 1 5 10 15

Ala Thr Leu Arg Cys Trp Ala Leu Gly Phe Tyr Pro Ala Glu Ile Thr
 20 25 30

Leu Thr Trp Gln Gln Asp Gly Glu Gly His Thr Gln Asp Thr Glu Leu
 35 40 45

Val Glu Thr Arg Pro Ala Gly Asp Gly Thr Phe Gln Lys Trp Ala Ala
 50 55 60

Val Val Val Pro Ser Gly Glu Glu Gln Arg Tyr Thr Cys His Val Gln
 65 70 75 80

His Glu Gly Leu Pro Glu Pro Val Thr Leu Arg Trp
 85 90

<210> 35
 <211> 63
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic chimeric sequence
 Transmembrane domain

<400> 35

Lys Pro Ala Ser Gln Pro Thr Ile Pro Ile Val Gly Ile Ile Ala Gly
 1 5 10 15

Leu Val Leu Leu Gly Ser Val Val Ser Gly Ala Val Val Ala Ala Val
 20 25 30

Ile Trp Arg Lys Lys Ser Ser Gly Gly Lys Gly Gly Ser Tyr Ser Lys
 35 40 45

Ala Glu Trp Ser Asp Ser Ala Gln Gly Ser Glu Ser His Ser Leu
 50 55 60

<210> 36
 <211> 72
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic chimeric sequence
 Reformed SP

<400> 36
 atggcggtca tggcgccccg aaccctcgtc ctgctactct cgggggccct gaccctgacc 60
 gagacctggg cg 72

<210> 37
 <211> 270
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic chimeric sequence
 al domain

<400> 37
 ggctccact ccttgaagta ttccacact tccgtgtccc ggcccgccg cggggagccc 60

cgttcacatct	ctgtgggcta	cgtggacgac	accagttcg	tgcgcttcga	caacgacgcc	120
gcgagtcoga	ggatggtgcc	gcgggcgcgc	tgatgggagc	aggaggggtc	agagtattgg	180
gaccgggaga	cacggagcgc	cagggacacc	gcacagattt	tccgagtga	tctgcggacg	240
ctgcgcggct	actacaatca	gagcgaggcc				270

<210> 38
 <211> 276
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic chimeric sequence
 a2 domain

<400> 38						
gggtctcaca	ccctgcagtg	gatgcatggc	tgcgagctgg	ggcccacag	gcgcttcctc	60
cgcggtatg	aacagttcgc	ctacgacggc	aaggattatc	tcaccctgaa	tgaggacctg	120
cgctcctgga	ccgcggtgga	ctctgcggct	cagatctcca	agcgcaagtg	tgaggcggcc	180
aattgtggctg	aacaaggag	agcctacctg	gagggcacgt	gcgtggagtg	gctccacaga	240
tacctggaga	acgggaaggga	gatgctgcag	cgcgcg			276

<210> 39
 <211> 276
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic chimeric sequence
 a3 domain

<400> 39						
gagcccccaa	agacacacgt	gactcaccac	ccatctctg	accatgaggc	caccctgagg	60
tgctggggcc	tggtcttcta	ccctgcggag	atcacactga	cctggcagca	ggatggggag	120
ggccataccc	aggacacgga	gctcgtggag	accaggcctg	caggggagtg	aaccttccag	180
aagtggggcag	ctgtgtgtgt	gccttctgga	gaggagcaga	gatacacgtg	ccatgtgcag	240
catgaggggc	tacccgagcc	cgtaaccctg	agatgg			276

<210> 40
 <211> 192
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic chimeric sequence
 Transmembrane domain

<400> 40
 aagcccgctt cccagccac catcccatc gtgggcatca ttgctggcct ggttctcctt 60
 ggatctgtgg tctctggagc tgtggttgct gctgtgatat ggaggaagaa gagctcaggt 120
 ggaaaaggag ggagctactc taaggctgag tggagcgaca gtgccagggt gtctgagtct 180
 cacagcttgt aa 192

<210> 41
 <211> 24
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic chimeric sequence
 Reformed SP

<400> 41

Met Ala Val Met Ala Pro Arg Thr Leu Val Leu Leu Leu Ser Gly Ala
 1 5 10 15

Leu Thr Leu Thr Glu Thr Trp Ala
 20

<210> 42
 <211> 90
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic chimeric sequence
 al domain

<400> 42

Gly Ser His Ser Leu Lys Tyr Phe His Thr Ser Val Ser Arg Pro Gly
 1 5 10 15

Arg Gly Glu Pro Arg Phe Ile Ser Val Gly Tyr Val Asp Asp Thr Gln
 20 25 30

Phe Val Arg Phe Asp Asn Asp Ala Ala Ser Pro Arg Met Val Pro Arg

35

40

45

Ala Pro Trp Met Glu Gln Glu Gly Ser Glu Tyr Trp Asp Arg Glu Thr
 50 55 60

Arg Ser Ala Arg Asp Thr Ala Gln Ile Phe Arg Val Asn Leu Arg Thr
 65 70 75 80

Leu Arg Gly Tyr Tyr Asn Gln Ser Glu Ala
 85 90

<210> 43

<211> 92

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic chimeric sequence
a2 domain

<400> 43

Gly Ser His Thr Leu Gln Trp Met His Gly Cys Glu Leu Gly Pro Asp
 1 5 10 15

Arg Arg Phe Leu Arg Gly Tyr Glu Gln Phe Ala Tyr Asp Gly Lys Asp
 20 25 30

Tyr Leu Thr Leu Asn Glu Asp Leu Arg Ser Trp Thr Ala Val Asp Thr
 35 40 45

Ala Ala Gln Ile Ser Lys Arg Lys Cys Glu Ala Ala Ser Glu Ala Glu
 50 55 60

His Gln Arg Ala Tyr Leu Glu Asp Thr Cys Val Glu Trp Leu His Lys
 65 70 75 80

Tyr Leu Glu Lys Gly Lys Glu Thr Leu Leu His Leu
 85 90

<210> 44

<211> 92

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic chimeric sequence
a3 domain

<400> 44

Glu Pro Pro Lys Thr His Val Thr His His Pro Ile Ser Asp His Glu
1 5 10 15

Ala Thr Leu Arg Cys Trp Ala Leu Gly Phe Tyr Pro Ala Glu Ile Thr
20 25 30

Leu Thr Trp Gln Gln Asp Gly Glu Gly His Thr Gln Asp Thr Glu Leu
35 40 45

Val Glu Thr Arg Pro Ala Gly Asp Gly Thr Phe Gln Lys Trp Ala Ala
50 55 60

Val Val Val Pro Ser Gly Glu Glu Gln Arg Tyr Thr Cys His Val Gln
65 70 75 80

His Glu Gly Leu Pro Glu Pro Val Thr Leu Arg Trp
85 90

<210> 45

<211> 63

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic chimeric sequence
Transmembrane domain

<400> 45

Lys Pro Ala Ser Gln Pro Thr Ile Pro Ile Val Gly Ile Ile Ala Gly
1 5 10 15

Leu Val Leu Leu Gly Ser Val Val Ser Gly Ala Val Val Ala Ala Val
20 25 30

Ile Trp Arg Lys Lys Ser Ser Gly Gly Lys Gly Gly Ser Tyr Ser Lys
35 40 45

Ala Glu Trp Ser Asp Ser Ala Gln Gly Ser Glu Ser His Ser Leu
50 55 60

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<210> 46
<211> 72
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic chimeric sequence
Reformed SP

<400> 46
atggcggtca tggcgccccg aaccctcgtc ctgctactct cgggggccct gaccctgacc 60
gagacctggg cg 72

<210> 47
<211> 270
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic chimeric sequence
al domain

<400> 47
ggctccact cctgaagta tttccacact tccgtgtccc ggcccgccg cggggagccc 60
cgcttcact ctgtgggcta cgtggacgac acccagttcg tgcgcttcga caacgacgcc 120
gcgagtcgga ggatgggtgc gcgggcgccg tggatggagc aggaggggtc agagtattgg 180
gaccgggaga cacggagcgc cagggacacc gcacagattt tccgagtga tctgcggcacg 240
ctgcgcggct actacaatca gagcgaggcc 270

<210> 48
<211> 276
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic chimeric sequence
a2 domain

<400> 48
gggtctcaca cctgcagtg gatgatgac tgcgagctgg ggcccgacag gcgcttctc 60
cgcggtatg aacagttcgc ctacgacgac aaggattatc tcaccctgaa tgaggacctg 120
cgctcctgga ccgcggtgga cactgcggct cagatctcca agcgcaagtg tgaggcggcc 180
tctgaggcgg agcaccagag agcctacctg gaagacacat gcgtggagtg gctccacaaa 240

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tacctggaga aggggaagga gacgctgctt cacctg

276

<210> 49
<211> 276
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic chimeric sequence
a3 domain

<400> 49
gagccccc aa agacacacgt gactcaccac cccatctctg accatgaggc caccctgagg 60
tgctggggccc tgggcttcta ccctgcggag atcacactga cctggcagca ggatggggag 120
ggccataccc aggacacgga gctcgtggag accaggcctg caggggatgg aaccttcag 180
aagtgggcag ctgtggtggt gccttctgga gaggagcaga gatacacgtg ccatgtgcag 240
catgaggggc taccgcagcc cgtcacccctg agatgg 276

<210> 50
<211> 192
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic chimeric sequence
Transmembrane domain

<400> 50
aagccggctt cccagcccac catccccatc gtgggcatca ttgctggcct ggttctcctt 60
ggatctgtgg tctctggagc tgtggttgct gctgtgatat ggaggaagaa gagctcaggt 120
ggaaaaggag ggagctactc taaggctgag tggagcgaca gtgccagggt gtctgagtct 180
cacagcttgt aa 192

<210> 51
<211> 21
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic chimeric sequence
SP of HLA-E

<400> 51

Met Val Asp Gly Thr Leu Leu Leu Leu Leu Ser Glu Ala Leu Ala Leu
 1 5 10 15

Thr Gln Thr Trp Ala
 20

<210> 52
 <211> 90
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic chimeric sequence
 a1 domain

<400> 52

Gly Ser His Ser Leu Lys Tyr Phe His Thr Ser Val Ser Arg Pro Gly
 1 5 10 15

Arg Gly Glu Pro Arg Phe Ile Ser Val Gly Tyr Val Asp Asp Thr Gln
 20 25 30

Phe Val Arg Phe Asp Asn Asp Ala Ala Ser Pro Arg Met Val Pro Arg
 35 40 45

Ala Pro Trp Met Glu Gln Glu Gly Ser Glu Tyr Trp Asp Arg Glu Thr
 50 55 60

Arg Ser Ala Arg Asp Thr Ala Gln Ile Phe Arg Val Asn Leu Arg Thr
 65 70 75 80

Leu Arg Gly Tyr Tyr Asn Gln Ser Glu Ala
 85 90

<210> 53
 <211> 92
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic chimeric sequence
 a2 domain

<400> 53

Gly Ser His Thr Leu Gln Trp Met His Gly Cys Glu Leu Gly Pro Asp
 1 5 10 15

Arg Arg Phe Leu Arg Gly Tyr Glu Gln Phe Ala Tyr Asp Gly Lys Asp
 20 25 30

Tyr Leu Thr Leu Asn Glu Asp Leu Arg Ser Trp Thr Ala Val Asp Thr
 35 40 45

Ala Ala Gln Ile Ser Glu Gln Lys Cys Asn Asp Ala Ser Glu Ala Glu
 50 55 60

His Gln Arg Ala Tyr Leu Glu Asp Thr Cys Val Glu Trp Leu His Lys
 65 70 75 80

Tyr Leu Glu Lys Gly Lys Glu Thr Leu Leu His Leu
 85 90

<210> 54
 <211> 92
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic chimeric sequence
 a3 domain

<400> 54

Glu Pro Pro Lys Thr His Val Thr His His Pro Ile Ser Asp His Glu
 1 5 10 15

Ala Thr Leu Arg Cys Trp Ala Leu Gly Phe Tyr Pro Ala Glu Ile Thr
 20 25 30

Leu Thr Trp Gln Gln Asp Gly Glu Gly His Thr Gln Asp Thr Glu Leu
 35 40 45

Val Glu Thr Arg Pro Ala Gly Asp Gly Thr Phe Gln Lys Trp Ala Ala
 50 55 60

Val Val Val Pro Ser Gly Glu Glu Gln Arg Tyr Thr Cys His Val Gln
 65 70 75 80

His Glu Gly Leu Pro Glu Pro Val Thr Leu Arg Trp

<210> 55
 <211> 63
 <212> PRT
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: Synthetic chimeric sequence
 Transmembrane domain

<400> 55
 Lys Pro Ala Ser Gln Pro Thr Ile Pro Ile Val Gly Ile Ile Ala Gly
 1 5 10 15

 Leu Val Leu Leu Gly Ser Val Val Ser Gly Ala Val Val Ala Ala Val
 20 25 30

 Ile Trp Arg Lys Lys Ser Ser Gly Gly Lys Gly Gly Ser Tyr Ser Lys
 35 40 45

 Ala Glu Trp Ser Asp Ser Ala Gln Gly Ser Glu Ser His Ser Leu
 50 55 60

<210> 56
 <211> 63
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: Synthetic chimeric sequence
 SP of HLA-E

<400> 56
 atggtagatg gaacctctct tttactcttc tcggaggccc tggcccttac ccagacctgg 60
 gcg 63

<210> 57
 <211> 270
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: Synthetic chimeric sequence
 al domain

<400> 57
 ggctcccact ccttgaagta ttccacact tccgtgtccc ggcccggccg cggggagccc 60
 cgttctatct ctgtgggcta cgtggacgac acccagttcg tgcgtttcga caacgacgcc 120
 gcgagtcgga ggatggtgcc gcggggcgccg tggatggagc aggaggggtc agagtattgg 180
 gaccgggaga caccgagcgc cagggacacc gcacagattt tccgagtga tctgcggacg 240
 ctgcgcggct actacaatca gagcgaggcc 270

<210> 58
 <211> 276
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic chimeric sequence
 a2 domain

<400> 58
 gggcttcaca ccctgcagtg gatgcatggc tgcgagctgg ggcccagacg gcgcttcctc 60
 cgcgggtatg aacagttcgc ctacgacggc aaggattatc tcacctgaa tgaggacctg 120
 cgctctctga ccgcggtgga caccggcggc agatctccg agcaaaagt taatgatgcc 180
 tctgagggcg agcaccagag agcctacctg gaagacacat gcgtggagtg gtccacaaa 240
 tacctggaga aggggaagga gacgtgctt cacctg 276

<210> 59
 <211> 276
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic chimeric sequence
 a3 domain

<400> 59
 gagccccaa agacacacgt gactaccac cccatctctg accatgaggc caccctgagg 60
 tgctggggcc tgggcttcta cctgcggag atcacactga cctggcagca ggatggggag 120
 ggccataccc aggacacgga gctcgtggag accaggcctg caggggatgg aaccttcag 180
 aagtgggcag ctgtggtggt gcttcttga gaggagcaga gatacacgtg ccatgtgcag 240
 catgaggggc tacccgagcc cgtcacctg agatgg 276

<210> 60

<211> 192
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic chimeric sequence
 Transmembrane domain

<400> 60
 aagccggctt cccagccac catcccatc gtgggcatca ttgctggcct ggttctcctt 60
 ggatctgtgg tctctggagc tgtggttgct gctgtgatat ggaggaagaa gagctcaggt 120
 ggaaaaggag ggagctactc taaggctgag tggagcgaca gtgcccaggg gtctgagtct 180
 cacagcttgt aa 192

<210> 61
 <211> 24
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic chimeric sequence
 Reformed SP

<400> 61
 Met Ala Val Met Ala Pro Arg Thr Leu Val Leu Leu Leu Ser Gly Ala
 1 5 10 15
 Leu Thr Leu Thr Glu Thr Trp Ala
 20

<210> 62
 <211> 90
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic chimeric sequence
 a1 domain

<400> 62
 Gly Ser His Ser Leu Lys Tyr Phe His Thr Ser Val Ser Arg Pro Gly
 1 5 10 15
 Arg Gly Glu Pro Arg Phe Ile Ser Val Gly Tyr Val Asp Asp Thr Gln
 20 25 30

Phe Val Arg Phe Asp Asn Asp Ala Ala Ser Pro Arg Met Val Pro Arg
 35 40 45

Ala Pro Trp Met Glu Gln Glu Gly Ser Glu Tyr Trp Asp Arg Glu Thr
 50 55 60

Arg Ser Ala Arg Asp Thr Ala Gln Ile Phe Arg Val Asn Leu Arg Thr
 65 70 75 80

Leu Arg Gly Tyr Tyr Asn Gln Ser Glu Ala
 85 90

<210> 63

<211> 92

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic chimeric sequence
 a2 domain

<400> 63

Gly Ser His Thr Leu Gln Trp Met His Gly Cys Glu Leu Gly Pro Asp
 1 5 10 15

Arg Arg Phe Leu Arg Gly Tyr Glu Gln Phe Ala Tyr Asp Gly Lys Asp
 20 25 30

Tyr Leu Thr Leu Asn Glu Asp Leu Arg Ser Trp Thr Ala Val Asp Thr
 35 40 45

Ala Ala Gln Ile Ser Glu Gln Lys Cys Asn Asp Ala Ser Glu Ala Glu
 50 55 60

His Gln Arg Ala Tyr Leu Glu Asp Thr Cys Val Glu Trp Leu His Lys
 65 70 75 80

Tyr Leu Glu Lys Gly Lys Glu Thr Leu Leu His Leu
 85 90

<210> 64

<211> 92

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic chimeric sequence
a3 domain

<400> 64

Glu Pro Pro Lys Thr His Val Thr His His Pro Ile Ser Asp His Glu
1 5 10 15

Ala Thr Leu Arg Cys Trp Ala Leu Gly Phe Tyr Pro Ala Glu Ile Thr
20 25 30

Leu Thr Trp Gln Gln Asp Gly Glu Gly His Thr Gln Asp Thr Glu Leu
35 40 45

Val Glu Thr Arg Pro Ala Gly Asp Gly Thr Phe Gln Lys Trp Ala Ala
50 55 60

Val Val Val Pro Ser Gly Glu Glu Gln Arg Tyr Thr Cys His Val Gln
65 70 75 80

His Glu Gly Leu Pro Glu Pro Val Thr Leu Arg Trp
85 90

<210> 65

<211> 63

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic chimeric sequence
Transmembrane domain

<400> 65

Lys Pro Ala Ser Gln Pro Thr Ile Pro Ile Val Gly Ile Ile Ala Gly
1 5 10 15

Leu Val Leu Leu Gly Ser Val Val Ser Gly Ala Val Val Ala Ala Val
20 25 30

Ile Trp Arg Lys Lys Ser Ser Gly Gly Lys Gly Gly Ser Tyr Ser Lys
35 40 45

Ala Glu Trp Ser Asp Ser Ala Gln Gly Ser Glu Ser His Ser Leu
 50 55 60

<210> 66
 <211> 72
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic chimeric sequence
 Reformed SP

<400> 66
 atggcggtca tggcgcccg aaccctcgtc ctgctactct cgggggccct gaccctgacc 60
 gagacctggg cg 72

<210> 67
 <211> 270
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic chimeric sequence
 a1 domain

<400> 67
 ggctcccact ccttgaagta tttccacact tccgtgtccc ggcccgcccg cggggagccc 60
 cgcttcatct ctgtgggcta cgtggacgac acccagttcg tgcgcttcga caacgacgcc 120
 gcgagtccga ggatggtgcc gcgggcgccg tggatggagc aggaggggtc agagtattgg 180
 gaccgggaga cacggagcgc caggacacc gcacagattt tccgagtga tctgcggacg 240
 ctgcgcggct actacaatca gagcgaggcc 270

<210> 68
 <211> 276
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic chimeric sequence
 a2 domain

<400> 68
 gggcttcaca ccttcagtg gatgatggc tgcgagctgg ggcccacag gcgcttcctc 60
 cgcggtatg aacagttcgc ctacgacggc aaggattatc tcaccctgaa tgaggacctg 120

cgctcctgga ccgcggtgga cacggcggct cagatctcgg agcaaaagtg taatgatgcc 180
 tctgagggcgg agcaccagag agcctacctg gaagacacat gcgtggagtg gctccacaaa 240
 tacctggaga aggggaagga gacgctgctt cacctg 276

<210> 69
 <211> 276
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic chimeric sequence
 a3 domain

<400> 69
 gagccccaa agacacacgt gactcaccac cccatctctg accatgaggc caccctgagg 60
 tgtctggccc tgggcttcta cctgcggag atcactga cctggcagca ggatggggag 120
 ggccataccc aggacacgga gctcgtggag accaggcctg caggggatgg aaccttcag 180
 aagtgggcag ctgtggtggt gccttctgga gaggagcaga gatacacgtg ccatgtgcag 240
 catgaggggc tacccgagcc cgtcacctg agatgg 276

<210> 70
 <211> 192
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic chimeric sequence
 Transmembrane domain

<400> 70
 aagccggctt cccagccac catcccatc gtgggcatca ttgctggcct ggttctcctt 60
 ggaatctgtg tctctggagc tgtggttgct gctgtgatat ggaggaagaa gagctcaggt 120
 ggaaaaggag ggagctactc taaggctgag tggagcgaca gtgccacggg gtctgagtct 180
 cacagcttgt aa 192

<210> 71
 <211> 21
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic chimeric sequence
 SP of HLA-E

<400> 71

Met Val Asp Gly Thr Leu Leu Leu Leu Leu Ser Glu Ala Leu Ala Leu
1 5 10 15

Thr Gln Thr Trp Ala
20

<210> 72

<211> 90

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic chimeric sequence
a1 domain

<400> 72

Gly Ser His Ser Leu Lys Tyr Phe His Thr Ala Val Ser Arg Pro Gly
1 5 10 15

Arg Gly Glu Pro Arg Phe Ile Ser Val Gly Tyr Val Asp Asp Thr Gln
20 25 30

Phe Val Arg Phe Asp Asn Asp Ala Ala Ser Pro Arg Met Val Pro Arg
35 40 45

Ala Pro Trp Met Glu Gln Glu Gly Ser Glu Tyr Trp Asp Arg Glu Thr
50 55 60

Arg Ser Ala Arg Asp Thr Ala Gln Ile Phe Arg Val Asn Leu Arg Thr
65 70 75 80

Leu Arg Gly Tyr Tyr Asn Gln Ser Glu Ala
85 90

<210> 73

<211> 92

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic chimeric sequence
a2 domain

<400> 73

Gly Ser His Thr Leu Gln Trp Met His Gly Cys Glu Leu Gly Pro Asp
1 5 10 15

Arg Arg Phe Leu Arg Gly Tyr Glu Gln Phe Ala Tyr Asp Gly Lys Asp
20 25 30

Tyr Leu Thr Leu Asn Glu Asp Leu Arg Ser Trp Thr Ala Val Asp Thr
35 40 45

Ala Ala Gln Ile Ser Glu Gln Lys Cys Asn Asp Ala Ser Glu Ala Glu
50 55 60

His Gln Arg Ala Tyr Leu Glu Asp Thr Cys Val Glu Trp Leu His Lys
65 70 75 80

Tyr Leu Glu Lys Gly Lys Glu Thr Leu Leu His Leu
85 90

<210> 74

<211> 92

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic chimeric sequence
a3 domain

<400> 74

Glu Pro Pro Lys Thr His Val Thr His His Pro Ile Ser Asp His Glu
1 5 10 15

Ala Thr Leu Arg Cys Trp Ala Leu Gly Phe Tyr Pro Ala Glu Ile Thr
20 25 30

Leu Thr Trp Gln Gln Asp Gly Glu Gly His Thr Gln Asp Thr Glu Leu
35 40 45

Val Glu Thr Arg Pro Ala Gly Asp Gly Thr Phe Gln Lys Trp Ala Ala
50 55 60

Val Val Val Pro Ser Gly Glu Glu Gln Arg Tyr Thr Cys His Val Gln
65 70 75 80

His Glu Gly Leu Pro Glu Pro Val Thr Leu Arg Trp
85 90

<210> 75
<211> 63
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic chimeric sequence
Transmembrane domain

<400> 75

Lys Pro Ala Ser Gln Pro Thr Ile Pro Ile Val Gly Ile Ile Ala Gly
1 5 10 15

Leu Val Leu Leu Gly Ser Val Val Ser Gly Ala Val Val Ala Ala Val
20 25 30

Ile Trp Arg Lys Lys Ser Ser Gly Gly Lys Gly Gly Ser Tyr Ser Lys
35 40 45

Ala Glu Trp Ser Asp Ser Ala Gln Gly Ser Glu Ser His Ser Leu
50 55 60

<210> 76
<211> 63
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic chimeric sequence
SP of HLA-E

<400> 76
atggtagatg gaacctctct ttactcctc tcggaggccc tggcccttac ccagacctgg 60
gcg 63

<210> 77
<211> 270
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic chimeric sequence

al domain

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<400> 77
ggtcccaact ccttgaagta ttccacact gccgtgtccc ggcccggccg cggggagccc      60
cgcttcattc ctgtgggcta cgtggacgac acccagttcg tgcgcttcga caacgacgcc      120
gcgagtcgga ggatggtgcc gcgggcgcgc tggatggagc aggaggggtc agagtattgg      180
gaccgggaga caccgagcgc cagggaacac gcacagattt tccgagtgaa tctgcggagc      240
ctgcgcggct actacaatca gagcgaggcc      270

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<210> 78
<211> 276
<212> DNA
<213> Artificial Sequence

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<220>
<223> Description of Artificial Sequence: Synthetic chimeric sequence
a2 domain

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<400> 78
gggtctcaca ccctgcagtg gatgcatggc tgcgagctgg ggcccacag gcgcttcctc      60
cgcgggtatg aacagttcgc ctacgacgac aaggattatc tcaccttgaa tgaggacctg      120
cgctcttgga ccgcggtgga caccgaggct cagatctcgc agcaaaagtg taatgatgcc      180
tctgaggcgg agcacacagag agcctacctg gaagacacat gcgtggagtg gctccacaaa      240
tacctggaga aggggaagga gacgtgctt cacttg      276

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<210> 79
<211> 276
<212> DNA
<213> Artificial Sequence

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<220>
<223> Description of Artificial Sequence: Synthetic chimeric sequence
a3 domain

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<400> 79
gagcccccac agacacacgt gactcaccac cccatctctg accatgaggc caccctgagg      60
tgtcggggcc tgggcttcta ccctcgggag atcacactga cctggcagca ggatggggag      120
ggccataacc aggacacgga gctcgtggag accaggcctg caggggatgg aaccttcag      180
aagtgggcag ctgtggtggt gccttctgga gaggagcaga gatacacgtg ccatgtgcag      240
catgaggggc taccgcagcc cgtcaccctg agatgg      276

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<210> 80
 <211> 192
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic chimeric sequence
 Transmembrane domain

<400> 80
 aagccggcgtt cccagcccac catccccatc gtgggcatca ttgctggcct ggttctcctt 60
 ggatctgtgg tctctggagc tgtggttgct gctgtgatat ggaggaagaa gagctcaggt 120
 ggaaaaggag ggagctactc taaggctgag tggagcgaca gtgcccaggg gtctgagtct 180
 cacagcttgt aa 192

<210> 81
 <211> 24
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic chimeric sequence
 Reformed SP

<400> 81
 Met Ala Val Met Ala Pro Arg Thr Leu Val Leu Leu Ser Gly Ala
 1 5 10 15
 Leu Thr Leu Thr Glu Thr Trp Ala
 20

<210> 82
 <211> 90
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic chimeric sequence
 al domain

<400> 82
 Gly Ser His Ser Leu Lys Tyr Phe His Thr Ala Val Ser Arg Pro Gly
 1 5 10 15

Arg Gly Glu Pro Arg Phe Ile Ser Val Gly Tyr Val Asp Asp Thr Gln
 20 25 30

Phe Val Arg Phe Asp Asn Asp Ala Ala Ser Pro Arg Met Val Pro Arg
 35 40 45

Ala Pro Trp Met Glu Gln Glu Gly Ser Glu Tyr Trp Asp Arg Glu Thr
 50 55 60

Arg Ser Ala Arg Asp Thr Ala Gln Ile Phe Arg Val Asn Leu Arg Thr
 65 70 75 80

Leu Arg Gly Tyr Tyr Asn Gln Ser Glu Ala
 85 90

<210> 83

<211> 92

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic chimeric sequence
 a2 domain

<400> 83

Gly Ser His Thr Leu Gln Trp Met His Gly Cys Glu Leu Gly Pro Asp
 1 5 10 15

Arg Arg Phe Leu Arg Gly Tyr Glu Gln Phe Ala Tyr Asp Gly Lys Asp
 20 25 30

Tyr Leu Thr Leu Asn Glu Asp Leu Arg Ser Trp Thr Ala Val Asp Thr
 35 40 45

Ala Ala Gln Ile Ser Glu Gln Lys Cys Asn Asp Ala Ser Glu Ala Glu
 50 55 60

His Gln Arg Ala Tyr Leu Glu Asp Thr Cys Val Glu Trp Leu His Lys
 65 70 75 80

Tyr Leu Glu Lys Gly Lys Glu Thr Leu Leu His Leu
 85 90

<210> 84
 <211> 92
 <212> PRT
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: Synthetic chimeric sequence
 a3 domain

<400> 84

 Glu Pro Pro Lys Thr His Val Thr His His Pro Ile Ser Asp His Glu
 1 5 10 15

 Ala Thr Leu Arg Cys Trp Ala Leu Gly Phe Tyr Pro Ala Glu Ile Thr
 20 25 30

 Leu Thr Trp Gln Gln Asp Gly Glu Gly His Thr Gln Asp Thr Glu Leu
 35 40 45

 Val Glu Thr Arg Pro Ala Gly Asp Gly Thr Phe Gln Lys Trp Ala Ala
 50 55 60

 Val Val Val Pro Ser Gly Glu Glu Gln Arg Tyr Thr Cys His Val Gln
 65 70 75 80

 His Glu Gly Leu Pro Glu Pro Val Thr Leu Arg Trp
 85 90

<210> 85
 <211> 63
 <212> PRT
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: Synthetic chimeric sequence
 Transmembrane domain

<400> 85

 Lys Pro Ala Ser Gln Pro Thr Ile Pro Ile Val Gly Ile Ile Ala Gly
 1 5 10 15

 Leu Val Leu Leu Gly Ser Val Val Ser Gly Ala Val Val Ala Ala Val
 20 25 30

 Ile Trp Arg Lys Lys Ser Ser Gly Gly Lys Gly Gly Ser Tyr Ser Lys

Ala Glu Trp Ser Asp Ser Ala Gln Gly Ser Glu Ser His Ser Leu
 50 55 60

<210> 86
 <211> 72
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic chimeric sequence
 Reformed SP

<400> 86
 atggcggtca tggcgcccg aaccctcgtc ctgctactct cgggggccct gaccctgacc 60
 gagacctggg cg 72

<210> 87
 <211> 270
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic chimeric sequence
 al domain

<400> 87
 ggtccaccat ccttgaagta ttccacact gccgtgtccc ggcccgccg cgaggagccc 60
 cgttcatct ctgtgggcta cgtggacgac acccagttcg tgcgcttcga caacgacgcc 120
 gcgagtccga ggatggtgcc gcgggcgcgc tggatggagc aggaggggtc agagtattgg 180
 gaccgggaga cacggagcgc cagggacacc gcacagattt tccgagtga tctgcggacg 240
 ctgcgcggt actacaatca gagcgaggcc 270

<210> 88
 <211> 276
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic chimeric sequence
 a2 domain

<400> 88
 gggcttcaca ccctgcagtg gatgcatggc tgcgagctgg ggcccgacag gcgcttcctc 60


```

cgcggggtatg aacagttcgc ctacgacggc aaggattatc tcacctgaa tgaggacctg 120
cgctcctgga ccgcggtgga cagcgcggt cagatctccg agcaaaagt taatgatgcc 180
tctgaggcgg agcaccagag agcctacctg gaagacacat gcgtggagt gctccacaaa 240
tacctggaga aggggaagga gacgtgctt cacctg 276

```

```

<210> 89
<211> 276
<212> DNA
<213> Artificial Sequence

```

```

<220>
<223> Description of Artificial Sequence: Synthetic chimeric sequence
a3 domain

```

```

<400> 89
gagcccccac agacacacgt gactcaccac cccatctctg accatgaggc caccctgagg 60
tgctggggccc tgggcttcta cctcgcgag atcacactga cctggcagca ggatggggag 120
ggccataccc aggacacgga gctcgtggag accaggcctg caggggatgg aaccttcag 180
aagtgggcag ctgtggtggt gccttctgga gaggagcaga gatacacgtg ccatgtgcag 240
catgaggggc taccgcagcc cgtcaccctg agatgg 276

```

```

<210> 90
<211> 192
<212> DNA
<213> Artificial Sequence

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<220>
<223> Description of Artificial Sequence: Synthetic chimeric sequence
Transmembrane domain

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<400> 90
aagccggctt cccagccac catcccacat gtgggcatca ttgctggcct ggttctcctt 60
ggatctgttg tctctggagc tgtggttgct gctgtgatat ggaggaagaa gagctcaggt 120
ggaaaaggag ggagctactc taaggctgag tggagcgaca gtgccagggt gtctgagtc 180
cacagcttgt aa 192

```

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<210> 91
<211> 9
<212> PRT
<213> Artificial Sequence

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<220>
<223> Description of Artificial Sequence: Synthetic HLA leader peptide

<400> 91

Val Met Ala Pro Arg Thr Leu Val Leu
1 5

<210> 92

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic HLA leader peptide

<400> 92

Val Met Ala Pro Arg Thr Leu Phe Leu
1 5